

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 794 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:  
(B) CLONE: U-D63

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 52:

GGCACGAGGG ATTATAAAAA GAAACTCGCA CTCAGCCAGA TTGACTCAAG CATGAAGGTT 60  
GCATCTTCG AATGTTCCCTT TTTTTTCCAA CATCTTTGA ATGTTACATG ACAATCATGA 120  
CGCCGTGCAT ACAATGATAC CTCTGATAGG GTTGAATGCA CAAACCACTC ATCGTGCTAT 180  
ATTGCAAGTG CTTATGTTG TATTCACTTT CTTATAATTT CAATGTGAGA GTTACCTTAG 240  
GTTCATATTA NATTTATATA ATATTGGGCA TAGATTTTT TGTCATTGTT TGTGATCTGC 300  
AATTCATTA GGTCACTCGAC CATATTATGG TAAATTTAAT TTACTAAATT ATATCTTGAG 360  
TTTATTGCTT TGCATATTTT GTGCTGGAAA CCATGCCAAT CCAACTCCTT TGCAAAACTT 420  
AAGATAATTA AAGGAGATAT TGAGGATGCC GACTGCTTTA GGTTATTGTC ATTANACAAT 480  
AACCGCCCGT GAAATGGAAA TCATGCAAAG CTTTGCATGG AGAATATGTT NATAGAGATA 540  
GACATGAAGA CATGAATATG CTTTCTTGAT GAACAAACGAT GTTCACNTGT TTACTGCATG 600  
CATGATACAT CCAATGTTCT AGGCTTGTG GCAATCATTT TATTCAAAAA ATTGTCTGTT 660  
TCTCTNCCNC CATAAGGTTA GCTTGTGGAA AATGTTCAAC TTTGGGCNCA NATGATCCGT 720  
TTTAGCAAAA TCCCNCCATT CCTATTTTTT TCCCGAATCC NNNTGGNAAA ANATCCTNAC 780  
ATACTATTTC CACA 794

(2) INFORMATION FOR SEO ID NO: 53:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 798 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:  
(B) CLONE: U-D65

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 53:

65 GGCACGAGGC CGCTAGAGCG AGTGCTGAGA TGGCTTGAG GGCCTTCTTC CCCCTCTGCA  
TCGCTCTCGT GGTGACGCTC TCACCTCTGT GTGATGCCAC TTCGCCCTAAC TACACCATCA  
CACCGCCCCAC CCCCCGTGGCC AAGCCGCCCTT CAGTTGAACC ACCACCCCTAC CACGGCCCTC  
70 CGACGACCCA CCCTAAGGCCA CCGAGTCATG GTGGCCAACC TCCGTCCCAC CATCACCCCAA

	CACCAATCTA CGGTGCACCC CCTCCGCAAC ACCACCACCA CCACCAACAC CACCACCAAC	300
	CTGCACCACC AACTCACGCA GAACACCCCTC CGTACTACCA CATGCCCTTCC CCGCCGCCGC	360
5	ATGGCCAGCA CCCGTCACCA CCGTCACATG ATTATCCCGT ACCTCCTGCT CACAAGCCCC	420
	GAACTCCGCC GCCGGTTTAC AAGTCTCCAC CACCGACCCA CGTCCTTAC CCTCCATCGA	480
10	CGCCACCCCCA CCATCCGACG CACCCGCCTT CTCAGCCGAC GCCGTACATAC AAGGCCCCGC	540
	CACCATACAA GAACATCCCT GANCATCTCC ACCGCCGCGT CACTATCATT CTCCGTCTTC	600
	ACCAACCANA CAACCAACCAT NCAAAATAGTC TCGTTTGAT CTCTCCGTTG AANATGAACC	660
15	AATGTCNTTT AATAACGATC AGGGTTCAA ATAAAAAACNA ATTTCCGCCA TTGTAATGCT	720
	ATGGTTGTTTC TCTCTGCTTC CGGGGGAAAG TTTCTTGGGT CATNTTAACC NCCTCCTAAT	780
	GTTCNNGCTCT TNNTANAA	798

## 20 (2) INFORMATION FOR SEQ ID NO: 54:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 824 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: unknown

30 (ii) MOLECULE TYPE: cDNA

35 (vii) IMMEDIATE SOURCE:  
 (B) CLONE: U-D84

## 35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 54:

	GGCACGAGCG CCCACCCCCG TGGCCAAGCC GCCTTCAGTT GAACCACCAAC CCTACCACGG	60
40	CCCTCCGACG ACCCACCTA AGCCACCGAG TCATGGTGGC CAACCTCCGT CCCACCATCA	120
	CCCAACACCA ATCTACGGTG CACCCCTCC GCAACACCAAC CACCACCAAC AACACCAACCA	180
45	CCAACCTGCA CCACCAACTC ACGCAGAACCA CCCTCCGTAC TACCACATGC CTTCCCCGCC	240
	GCCGCATGGC CAGCACCCGT CACCACCGTC ACATGATTAT CCCGTACCTC CTGCTCACAA	300
50	GCCCCGAACT CCGCCGCCGG TTTACAAGTC TCCACCACCG ACCCACCGTC CTTACCCCTCC	360
	ATCGACGCCA CCCCACCATC CGACGCACCC GCCTTCTCAG CCGACGCCGT CATAACAAGGC	420
	CCCGCCANCA TNCNAGACCA TCCCTTGAGC ACTTCTCCAN CGNTTGCCTT TATTATCATT	480
55	CTCCGTCTTC ACCACCAACCA CCACCAACCAT ACAAAATAGTC TCGTTGCCA TCTCTCCGTT	540
	GAAGATGACG CAGTGTGTT TTAGTAGCGA TCAGGGTTAC CAATAAGAAC GATGTTGCCG	600
60	CCATTGTAAT GGCTATGGTT GTTCTCTCTG CTTTTCCGGG GGAAGGTTCT TTGGGTTCAT	660
	GTAAACCTC TCTCTTAAAT GTTCATGCAT CTTATTATAA ACNAAAATTG GCCATTTNNNN	720
	NNNTNTNNNT NNNNNNTNNNN NNNNNAAAAC TCNAAAATA TTTTAAAAAA CGGGCGGGGG	780
65	GCCCCATCNAT TTTCCNNCCC GGGTNGGGGN TCCCAGNTTA TTNT	824

## (2) INFORMATION FOR SEQ ID NO: 55:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 797 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: single  
 (D) TOPOLOGY: unknown

5 (ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:  
 (B) CLONE: U-D75

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 55:

GGCACGAGGG TTACGATCGT CATGTTGGGG GTGTTCAGCG GGGNAGGTGG TGGAGGTGCC	60
GGCGGAGCTG GTGGCCGCCG GCAGCAGGAC GCCGTCCCCT AAGACACGAG CGTCGGAGCT	120
GATCAACCGA TTCCTCGGGA GCTTCGCTCC CGCGGTGTCG ATCCAGATCG GGGACTTGGG	180
20 ACACCTCGCC TACTCCCACG CCAACCAGTC CCCCTTCGCT CCCAGGTTGT TTGCAGCGAA	240
GGACGANATT TACTGCCTCT TCAAGGGAGT GCTGACCAAC CTGGGCAGCT TGAGGCAGCA	300
25 GTATGGGCTT TCCAAGAGTG CCGACNAGGT GGTGCTGGTC ATCGAACGCCT ACAAGGCCCT	360
CCGTGACCGA GCTCCCTATC CTCCCAGCTT CATGCTCGCA CACCTTACTG GCAACTTCGC	420
CTTCGTGCTC TTGACAAGT CCACATCATC CATCCTTGT GCATCTGACC CANATGGAAN	480
30 ANTACCCCTG TTCTGGGGGA TCACTGCANA TGGATGCCTT GCCTTGCTG ACNATCTANA	540
CTTGCTGAAG GGATCGTGCG GGAAGTCACT TGCACCATTG CCTGAAGGAT GTTACTATTG	600
35 CAATGCCTTG GGGGCCCTGA AAANCTATGA AAACCCCAAC ACAAGGTGAA CTGCTGTTTC	660
TTGAANATGA AGAANAATTN TTGTGCCNC TTTCAAGGTG GAANGATCTG CCNTTCTTGC	720
GGNAACCCCC TAATCAAGGA ACATCTTCCA ATGTTGGGG CNAATGATCC TCTTAAAATC	780
40 CTAAAAATTCT TGGAATT	797

(2) INFORMATION FOR SEQ ID NO: 56:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 804 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: unknown

50 (ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:  
 (B) CLONE: U-D83

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 56:

60 GGCACGAGCT TCCACACAGG TGAGGGTAAG TCGGTTACGA TCGTCATGTT GGGGGTGTTC	60
AGCGGGGAGG TGGTGGAGGT GCCGGCGGAG CTGGTGGCCG CCGGCAGCAG GACGCCGTCC	120
65 CCTAAGACAC GGGCGTCGGA GCTGATCAAC CGATTCTCG GGAGCTTCGC TCCCGCGGTG	180
TCGATCCAGA TCGGGGACTT GGACACCTC GCCTACTCCC ACGCCAACCA GTCCCCCTTC	240
GCTCCCAGGT TGTTTGCAGC GAAGGACGAN ATTACTGCC TCTTCAAGGG AGTGCCTGACC	300
70 AACCTGGGCA GCTTGAGGCA GCAGTATGGG CTTTCCAAGA GTGCCGACNA GGTGGTGCTG	360